Glossary and Basic Terminology
Principles of Computing

Fall 2024

Contents

A

- `bash`: The Bourne-Again Shell, the default shell on Linux and the most popular shell program in the world. Based on `sh` and released in 1989.

B

- `bash`: The Bourne-Again Shell, the default shell on Linux and the most popular shell program in the world. Based on `sh` and released in 1989.

C

- `closed-source software`: Software whose source code is *not* freely available from the developers.
- `CLI`: Command-Line Interface. A method of interacting with an application based around executing text-based commands. Implemented using a `REPL`. Commonly requires only a keyboard.

D

- `directory`: A file that contains other files inside of it. One of the two important file types.

F

- `file`: `TODO`
- `fish`: A user-friendly `shell` program.
- `folder`: See the entry on directories.
- `FOSS`: Free and Open-Source Software.
- `free software`: Software that is distributed under a license that permits running the software for any purpose, as well as studying, modifying, and redistributing it.
- `freedom-respecting software`: See the entry on free software.

G

- `GUI`: Graphical User Interface. A method of interacting with an application by using visual symbols, metaphors, gestures, or pointing. Commonly involves the use of a mouse, touchpad, touch screen, or controller.
- `GNU`: GNU's Not UNIX. A massive open-source software project founded by Richard Stallman.
- `GNU GPL`: The General Public License, a very popular public software license made by Richard Stallman.

I

- `IPython`: A command-line interface for Python.

· `IDE`: Integrated Development Environment. A text editor with features that facilitate software development.

J

· `Jupyter`: An open-source software project that extends IPython to the Julia and R programming languages.

L

· `libre software`: See the entry on free software.
· `Linux`: A large family of open-source, UNIX-like operating systems based on using GNU.

M

· `macOS`: A UNIX-like operating system developed by Apple and originally called Mac OS X.

O

· `open-source software`: Software that is distributed along with the source code that produced the software.
· `OS`: Operating System
· `OSS`: Open-Source Software.

P

· `POSIX`: Portable Operating System Interface
· `Python`: An interpreted, dynamically typed programming language

R

· `RAM`: Random Access Memory. Where all currently-running processes store their data.
· `recursion`: See the entry on recursion.
· `REPL`: Read-Evaluate-Print Loop.

S

· `sh`: The Bourne `shell`, precursor to `bash` and released in 1979.
· `shell`: A command-line interface for interacting with the OS.
· `stdin`: The *standard input* stream. Used for receiving input from other processes.
· `stderr`: The *standard error* stream. Used specifically for sending error messages to other processes.
· `stdout`: The *standard output* stream. Used for sending messages to other processes.

T

· `terminal`: An application that invokes and manages a `shell`.

U

· `UNIX`: The first *portable* operating system and the foundation for what would eventually become Linux.

V

· `VSCode`: An incredibly popular IDE developed by Microsoft.
· `VSCodium`: An open-source version of the popular VSCode IDE with telemetry disabled by default.

W

· `Windows`: An operating system made by Microsoft.

Z

· `zsh`: Z shell, the default `shell` on macOS.